

December 21, 2015

Ms. Brenda Scott-Henry  
Department of Environmental Affairs - City of Gary  
839 Broadway, 2<sup>nd</sup> Floor, NE  
Gary, IN 46402



**ENVIRONMENTAL  
INFORMATION  
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**Subject: 4<sup>th</sup> Quarter 2015 NSPS Surface Emissions Monitoring (SEM)  
Gary Landfill – Gary, IN**

Dear Brenda:

On December 15-16, 2015, Environmental Information Logistics LLC. (EIL) performed surface emissions monitoring at Gary Landfill. This event satisfies monitoring requirements for fourth quarter 2015 set forth by the USEPA New Source Performance Standards (NSPS), 40 CFR 60.775 (c) and (d) and 40 CFR 60, Appendix A, Method 21.

A Thermo Scientific TVA 100B vapor Analyzer PID/FID was used to perform the emissions monitoring. Only the instrument's FID mode was used. The FID was calibrated at the beginning of monitoring on each day in conformance with Method 21 requirements. Calibration logs are included in Attachment A.

### **Weather Conditions**

The SEM event was performed during typical December weather conditions. Weather conditions for the 15<sup>th</sup> and 16<sup>th</sup> were as follows.

#### **December 15<sup>th</sup>**

Overcast Skies  
Dry to wet ground  
Wind 0-5 mph out of the NE  
Temperature at approximately 40 degrees Fahrenheit

#### **December 16<sup>th</sup>**

Overcast Skies, scattered light drizzle in morning  
Moist to wet ground  
Wind 5-10 mph out of the SW  
Temperature at approximately 37 degrees Fahrenheit

### **Monitoring Summary**

An EIL field technician monitored the facility according to a route map which covers the entirety of the waste collection area in a serpentine pattern spaced 30 meters apart. The FID was held 8-10 centimeters off the ground in accordance with the Surface Emissions Monitoring plan. The route map was done in reverse to allow for observation of areas with dense vegetation from a high vantage point. Monitoring was not possible in some of these areas due to the excessive tall and dense vegetation. Areas where observations indicated the possibility for elevated emissions (where accessible) including but not limited to areas of distressed vegetation, gullies and exposed GCL were also monitored. A route map is included in Attachment B. A map of non-accessible areas is included in Attachment C.

Four exceedances at concentrations greater than 500 PPM above background were noted during the SEM. A table of exceedances and a map of exceedance locations are included in Attachment D.

If you have any questions, please call Andy or Ben at (630) 254-9382.

Sincerely,

Environmental Information Logistics, LLC



Andrew J. Querio, P.E.  
Project Manager



Ben Wade  
Environmental Scientist

Attachments:

- A- Field Calibration Logs
- B- Route Map
- C- Non-Accessible Areas
- D- Exceedance Summary
  - D-1: Summary Table
  - D-2: Location map
  - D-3: Exceedance form A-3
- E- Cover Integrity Inspection

## Attachment A - Field Calibration Logs

**Table A - 1**  
**Sample Monitoring Instrument Performance Evaluation Form**  
**Surface Monitoring Design Plan**

40 CFR 60.755(d)(3) requires performance evaluation of response factor, response time and calibration precision according to 40 CFR 60 Appendix A, Method 21. The requirements are presented below along with locations to record the evaluations.

**Response Factor:**

Response factor is the ratio of the known concentration of a VOC compound to the observed meter reading when measured using an instrument calibrated with the reference compound specified in the applicable regulation. Since the monitoring instrument is being used to detect methane and the calibration reference compound is methane, the response factor by definition is one. No further evaluation is required.

**Response Time:**

Response time is the time interval from a step change in VOC concentration at the input of the sampling system to the time at which 9 percent of the corresponding final value is reached as displayed on the instrument readout meter.

Performance Requirement: Method 21 requires the instrument response time to be equal to or less than 30 seconds.

Evaluation Frequency: Prior to placing instrument into service (for the first time or after it was out of service for maintenance or repair). If modification to the sample pumping system or flow configuration is made that would change the response time, a new test is required prior to further use.

Evaluation Procedure: Calibrate instrument with the methane calibration gas. Introduce zero gas into the instrument sample probe. When the meter reading has stabilized, switch quickly to the specified calibration gas. Measure the time from switching to when 90 percent of the final stable reading is attained. Perform this test sequence three time and record the results. Calculate the average response time. Use the form below or a similar format to document this procedure.

Date:	<u>12-15-15</u>
Operator Name:	<u>BEN WADE</u>
Facility:	<u>GARY LF</u>
Instrument ID:	<u>TVA-1000B</u>
Calibration Gas Conc.:	<u>500 PPM</u>
90% of Calib. Gas Conc.:	<u>450 PPM</u>

<u>Trial No.</u>	<u>Time to reach 90% gas value</u>
1	<u>2.2</u> seconds
2	<u>2.9</u> seconds
3	<u>2.4</u> seconds
Average	<u>2.5</u> seconds

**Table A - 1**  
**Sample Monitoring Instrument Performance Evaluation Form**  
**Surface Monitoring Design Plan**  
(cont.)

**Calibration Precision:**

Calibration precision is the degree of agreement between measurements of the same known value, expressed as the relative percentage of the average difference between the meter readings and the known concentration to the known concentration.

Performance Requirement: The calibration precision must be equal to or less than 10 percent of the calibration gas value.

Evaluation Frequency: Must be completed prior to placing instrument into service, and at subsequent 3-month intervals or at the next use whichever is later.

Evaluation Procedure: Calibrate instrument with the methane calibration gas. Make a total of three measurements by alternately using zero gas and the specified calibration gas. Record the meter readings. Calculate the average algebraic difference between the meter readings and the known value. Divide this average difference by the known calibration value and multiply by 100 to express the resulting calibration precision as a percentage.

Date: 12-15-15  
Operator Name: BEN WADE  
Facility: GARY LF  
Instrument ID: TVA-1000B  
Calibration Gas Conc.: 500 ppm

<u>Trial No.</u>	<u>Meter Reading After Zero Gas</u>	<u>Difference Between Calibration Gas and Meter Reading</u>
1	<u>496</u> ppm	<u>4</u> ppm
2	<u>515</u> ppm	<u>15</u> ppm
3	<u>490</u> ppm	<u>10</u> ppm
Average Difference:		<u><del>9</del> 9.7</u> ppm

$$\begin{aligned}
 \text{Calibration Precision} &= \text{Average Difference} / \text{Calibration Gas Conc.} \times 100\% \\
 &= \frac{9.7}{500} \times 100\% \\
 &= \underline{1.94\%}
 \end{aligned}$$

**Table A - 2**  
**Sample Instrument Calibration and Monitoring Procedures Form**  
**Surface Monitoring Design Plan**

The calibration procedures in 40 CFR 60 Appendix A, Method 21 must be conducted immediately before commencing a surface monitoring survey. [40 CFR 60.755(d)(4)] Calibration, background readings and monitoring details can be recorded using this form.

**Calibration Procedure:**

The calibration gas should be methane in air at a nominal concentration of 500 ppm. [See Method 21 for further calibration gas requirements.]

Assemble and start up the analyzer according to the manufacturer's instructions. After the appropriate warm-up period and zero internal calibration procedure, introduce the calibration gas into the instrument sample probe. Adjust the instrument meter readout to correspond to the calibration gas value. Record the calibration information in the table below.

**Background Concentration:**

Determine the background concentration by moving the probe inlet upwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. Record the background concentration and location in the table below.

**General Information:**

Date: 12-15-16  
Operator Name: BEW WADE  
Facility: GARY LF  
Instrument ID: \_\_\_\_\_  
Wind Direction: N (NE) E SE S SW W NW (circle one)  
Approximate Wind Speed 0-5 mph  
General Weather: 40 °F,  
clear, partly cloudy, overcast, \_\_\_\_\_ (circle one or write in)  
no precip., drizzle, rain, snow, \_\_\_\_\_ (circle one or write in)

**Calibration Information:**

Calibration Gas Conc.: 500 ppm  
Conduct internal zero calibration? (Yes) No (circle one)  
Instrument reading after calibration: 500 ppm (should be same as above)  
Time of Calibration: 10:20 am pm (fill in and pick one)

**Background Concentration Information:**

Background concentration upwind of site: - 10 ppm  
Background concentrations downwind of site: - 7 ppm

Location of background readings: outside NE gate, outside sw corner of site

**Table A - 1**  
**Sample Monitoring Instrument Performance Evaluation Form**  
**Surface Monitoring Design Plan**

40 CFR 60.755(d)(3) requires performance evaluation of response factor, response time and calibration precision according to 40 CFR 60 Appendix A, Method 21. The requirements are presented below along with locations to record the evaluations.

**Response Factor:**

Response factor is the ratio of the known concentration of a VOC compound to the observed meter reading when measured using an instrument calibrated with the reference compound specified in the applicable regulation. Since the monitoring instrument is being used to detect methane and the calibration reference compound is methane, the response factor by definition is one. No further evaluation is required.

**Response Time:**

Response time is the time interval from a step change in VOC concentration at the input of the sampling system to the time at which 9 percent of the corresponding final value is reached as displayed on the instrument readout meter.

Performance Requirement: Method 21 requires the instrument response time to be equal to or less than 30 seconds.

Evaluation Frequency: Prior to placing instrument into service (for the first time or after it was out of service for maintenance or repair). If modification to the sample pumping system or flow configuration is made that would change the response time, a new test is required prior to further use.

Evaluation Procedure: Calibrate instrument with the methane calibration gas. Introduce zero gas into the instrument sample probe. When the meter reading has stabilized, switch quickly to the specified calibration gas. Measure the time from switching to when 90 percent of the final stable reading is attained. Perform this test sequence three time and record the results. Calculate the average response time. Use the form below or a similar format to document this procedure.

Date:	<u>12-16-15</u>
Operator Name:	<u>B. WADE</u>
Facility:	<u>GARY LF</u>
Instrument ID:	<u>TVA-1000B</u>
Calibration Gas Conc.:	<u>500 ppm</u>
90% of Calib. Gas Conc.:	<u>450 ppm</u>

<u>Trial No.</u>	<u>Time to reach 90% gas value</u>
1	<u>1.9</u> seconds
2	<u>2.3</u> seconds
3	<u>2.5</u> seconds
Average	<u>2.2</u> seconds

**Table A - 1**  
**Sample Monitoring Instrument Performance Evaluation Form**  
**Surface Monitoring Design Plan**  
 (cont.)

**Calibration Precision:**

Calibration precision is the degree of agreement between measurements of the same known value, expressed as the relative percentage of the average difference between the meter readings and the known concentration to the known concentration.

Performance Requirement: The calibration precision must be equal to or less than 10 percent of the calibration gas value.

Evaluation Frequency: Must be completed prior to placing instrument into service, and at subsequent 3-month intervals or at the next use whichever is later.

Evaluation Procedure: Calibrate instrument with the methane calibration gas. Make a total of three measurements by alternately using zero gas and the specified calibration gas. Record the meter readings. Calculate the average algebraic difference between the meter readings and the known value. Divide this average difference by the known calibration value and multiply by 100 to express the resulting calibration precision as a percentage.

Date: 12-16-15  
 Operator Name: B. WADE  
 Facility: GARY LF  
 Instrument ID: TVA-1000 B  
 Calibration Gas Conc.: 500 ppm

<u>Trial No.</u>	<u>Meter Reading After Zero Gas</u>	<u>Difference Between Calibration Gas and Meter Reading</u>
1	<u>499</u> ppm	<u>1</u> ppm
2	<u>490</u> ppm	<u>10</u> ppm
3	<u>493</u> ppm	<u>7</u> ppm
Average Difference:		<u>6</u> ppm

$$\begin{aligned}
 \text{Calibration Precision} &= \text{Average Difference} / \text{Calibration Gas Conc.} \times 100\% \\
 &= \frac{6}{500} \times 100\% \\
 &= \underline{1.2} \%
 \end{aligned}$$



**Table A - 2**  
**Sample Instrument Calibration and Monitoring Procedures Form**  
**Surface Monitoring Design Plan**

The calibration procedures in 40 CFR 60 Appendix A, Method 21 must be conducted immediately before commencing a surface monitoring survey. [40 CFR 60.755(d)(4)] Calibration, background readings and monitoring details can be recorded using this form.

**Calibration Procedure:**

The calibration gas should be methane in air at a nominal concentration of 500 ppm. [See Method 21 for further calibration gas requirements.]

Assemble and start up the analyzer according to the manufacturer's instructions. After the appropriate warm-up period and zero internal calibration procedure, introduce the calibration gas into the instrument sample probe. Adjust the instrument meter readout to correspond to the calibration gas value. Record the calibration information in the table below.

**Background Concentration:**

Determine the background concentration by moving the probe inlet upwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. Record the background concentration and location in the table below.

**General Information:**

Date: 12-16-15  
Operator Name: B. WADE  
Facility: GARY CF  
Instrument ID: TVA-1000B  
Wind Direction: N NE E SE S SW W NW (circle one)  
Approximate Wind Speed 5-10 mph  
General Weather: 37 °F,  
clear, partly cloudy, overcast, \_\_\_\_\_ (circle one or write in)  
no precip., drizzle, rain, snow, \_\_\_\_\_ (circle one or write in)

**Calibration Information:**

Calibration Gas Conc.: 500 ppm  
Conduct internal zero calibration? Yes No (circle one)  
Instrument reading after calibration: 500 ppm (should be same as above)  
Time of Calibration: 8:00 am pm (fill in and pick one)

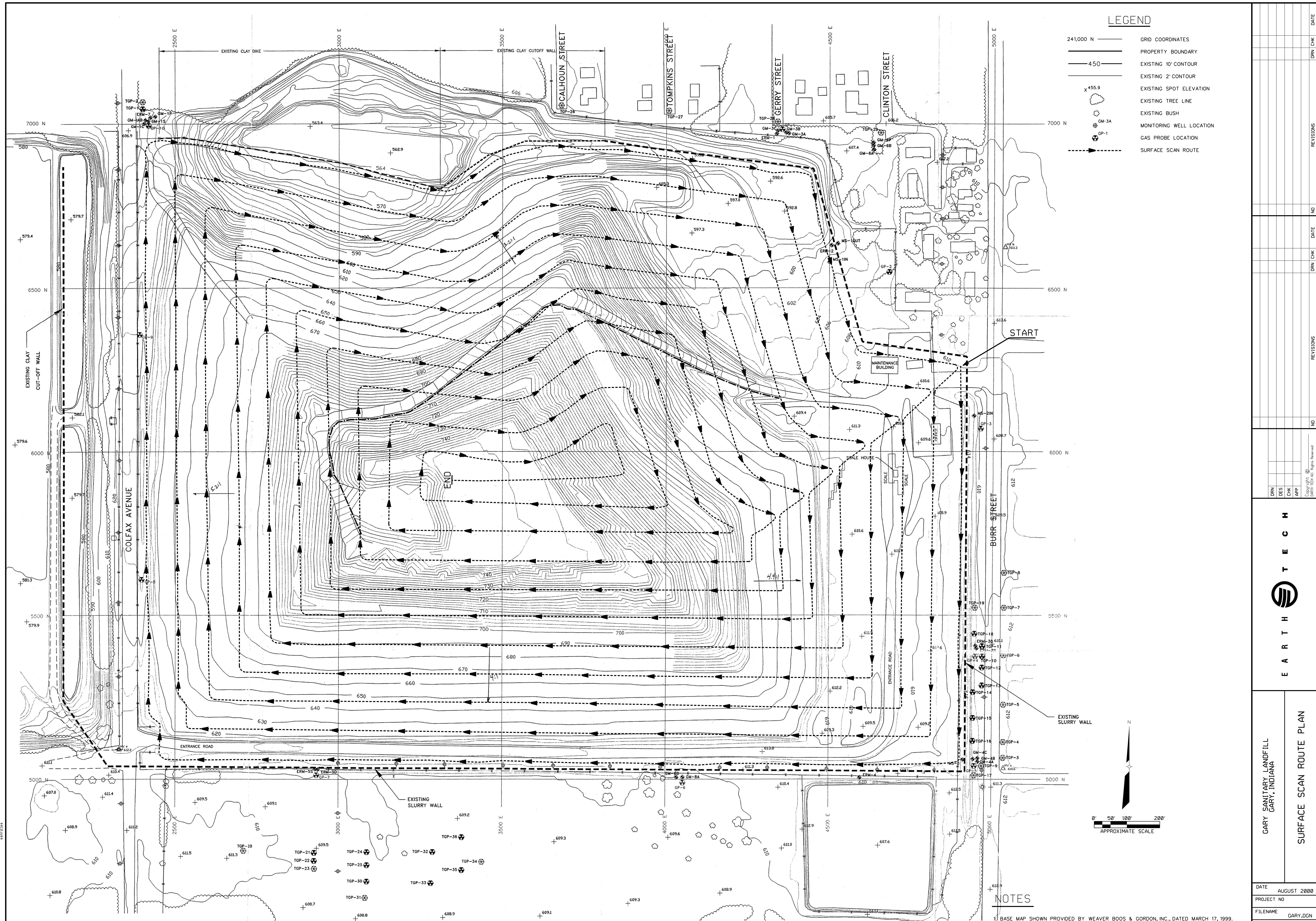
**Background Concentration Information:**

Background concentration upwind of site: - 3 ppm  
Background concentrations downwind of site: - 6 ppm

Location of background readings: outside NE gate, outside sw corner  
of CF

## Attachment B - Route Map

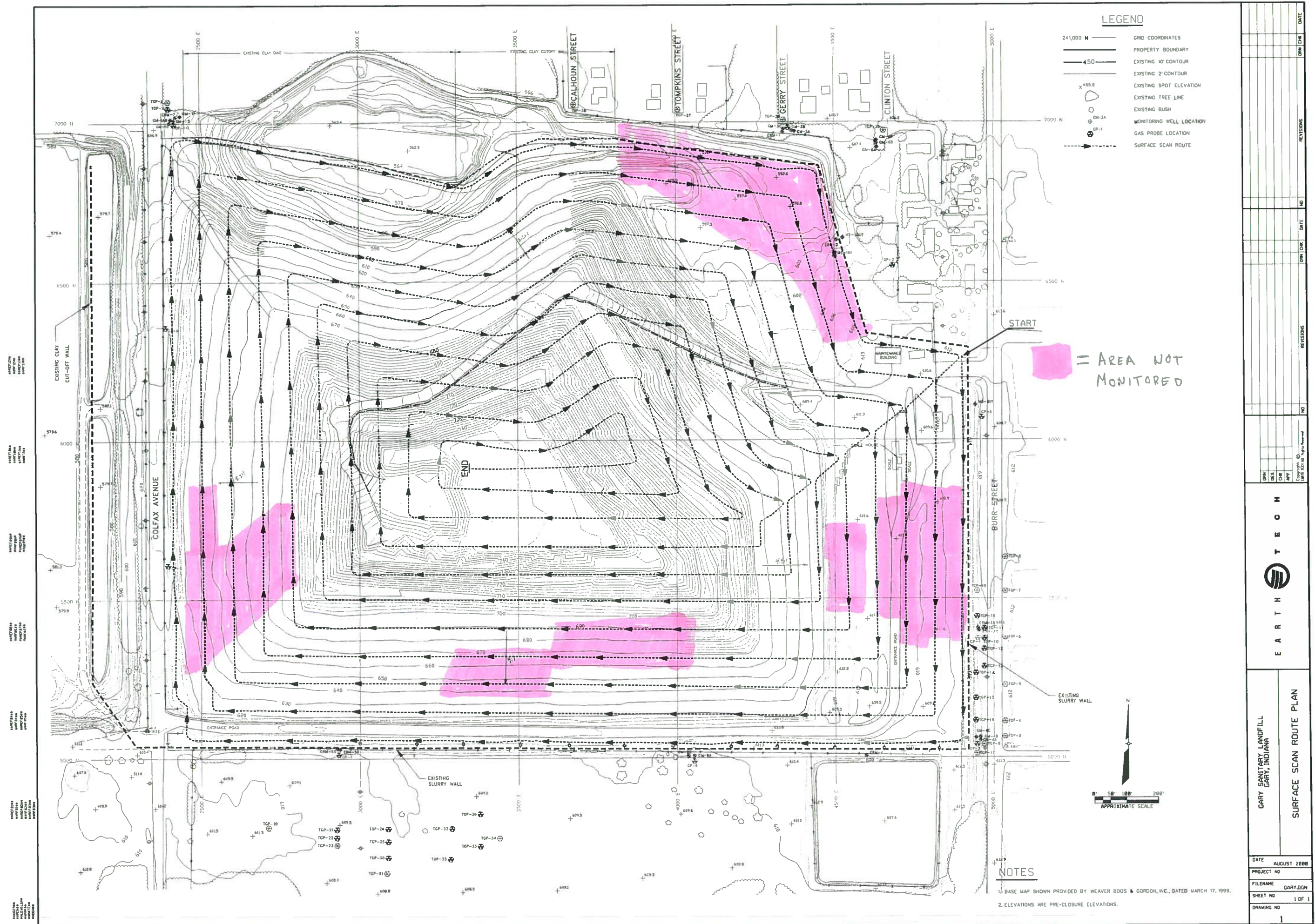






## Attachment C - Non-Accessible Areas Map



[illegible]



## Attachment D – Exceedance Summary

D-1: Summary Table

D-2: Location Map

D-3 Exceedance Form A-3

## D-1: Summary Table

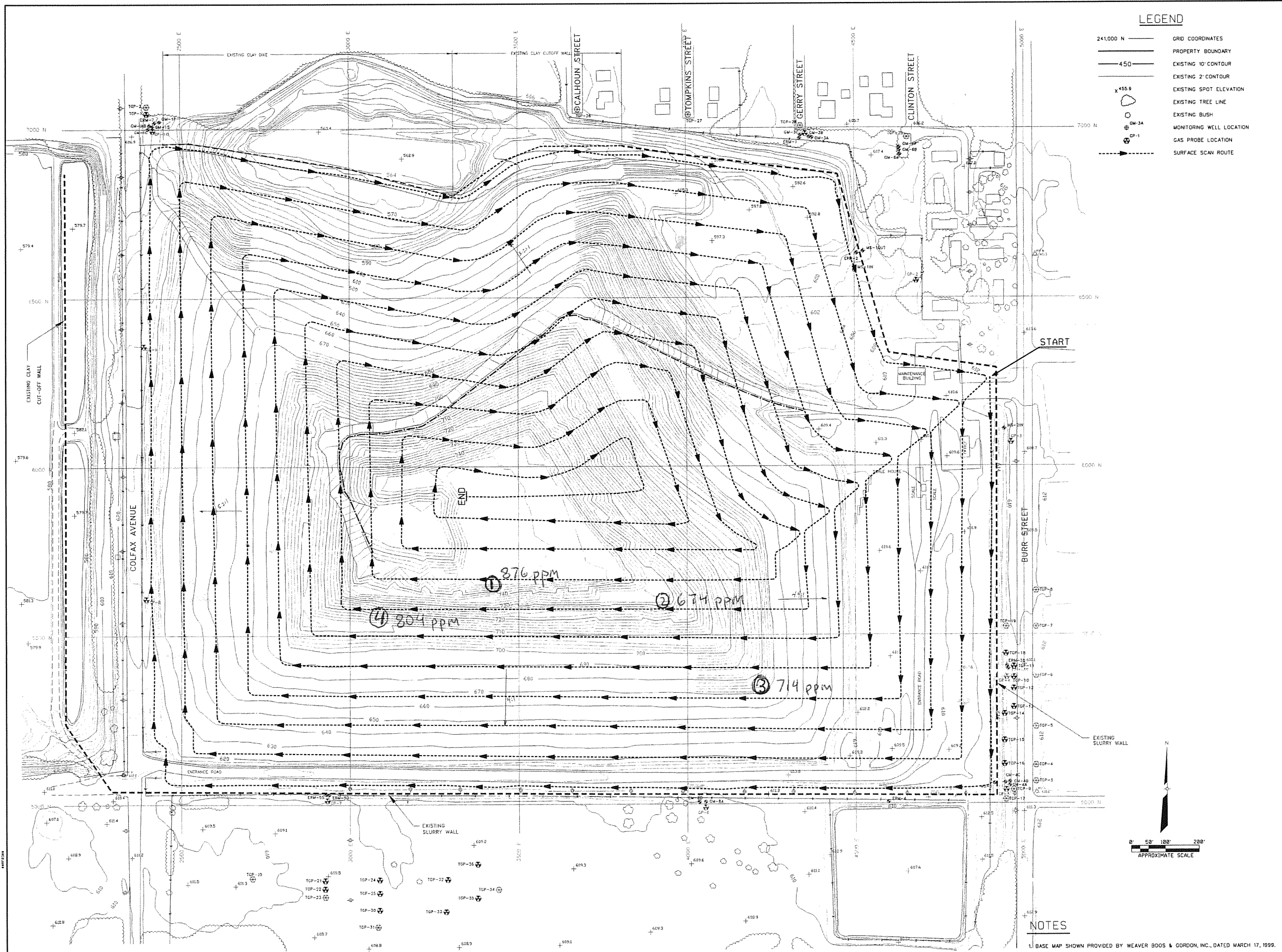
Exceedance Summary			
Exceedance	Date and Time	Concentration in PPM	Location
1	12/15/2015 11:26	876	~300' WSW of flare #3 in tall vegetation
2	12/15/2015 12:00	674	~200' SE of #2 and ~200' WNW of flare #4
3	12/16/2015 10:30	714	~300' SE of flare #18
4	12/16/2015 12:12	804	~50' NE of Well #13

\*Exceedance locations are marked with double orange survey flags. Sets of four flags visible from referenced flares and well locations point to the Exceedance location.

\*locations are plotted on attached map

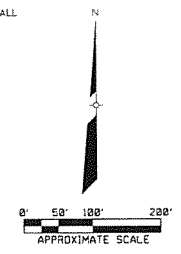


## D-2 Exceedance Location Map



**LEGEND**

- 241,000 N ——— GRID COORDINATES
- PROPERTY BOUNDARY
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING SPOT ELEVATION
- EXISTING TREE LINE
- EXISTING BUSH
- MONITORING WELL LOCATION
- GAS PROBE LOCATION
- SURFACE SCAN ROUTE



**NOTES**

1. BASE MAP SHOWN PROVIDED BY WEAVER BOOS & GORDON, INC., DATED MARCH 17, 1999.
2. ELEVATIONS ARE PRE-CLOSURE ELEVATIONS.

DATE		AUGUST 2000	
PROJECT NO			
FILENAME		GARY.DGN	
SHEET NO		1 OF 1	
DRAWING NO			
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D-3 Exceedance form A-3

**Table A - 3**  
**Sample Individual Monitoring Exceedance Form**  
**Surface Monitoring Design Plan**

Use this form to record an individual monitoring exceedance and follow-up monitoring activities. This form is only used when a reading of 500 ppm above background is encountered during the surface monitoring. Use a separate form for each initial exceedance.

**Initial Monitoring Exceedance:**

Date: 12-15 Time: 11:26 am pm Monitoring Technician Initials: BW  
Instrument reading - Background reading: 866 ppm - -10 ppm = 876 ppm

Location of monitored exceedance (include description of field marker used):

Location 1, orange flags, 300' WSW of flare #3

Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days:

**Remonitor location within 10 calendar days of initial exceedance:**

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.

If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

**Remonitor location within 10 calendar days of 2nd exceedance:**

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.

If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

(use additional forms if necessary)\*

\*If remonitoring shows 3 consecutive exceedances within a quarterly period a new well or other collection device must be installed within 120 days of initial exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

**Table A - 3**  
**Sample Individual Monitoring Exceedance Form**  
**Surface Monitoring Design Plan**

Use this form to record an individual monitoring exceedance and follow-up monitoring activities. This form is only used when a reading of 500 ppm above background is encountered during the surface monitoring. Use a separate form for each initial exceedance.

**Initial Monitoring Exceedance:**

Date: 12-15 Time: 12:00 am (pm) Monitoring Technician Initials: BW  
Instrument reading - Background reading: 664 ppm - -10 ppm = 674 ppm

Location of monitored exceedance (include description of field marker used):

Location 2, orange flag 5, 200' SE #2, 200' WNW #4  
Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days:

**Remonitor location within 10 calendar days of initial exceedance:**

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.

If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

**Remonitor location within 10 calendar days of 2nd exceedance:**

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.

If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

(use additional forms if necessary)\*

\*If remonitoring shows 3 consecutive exceedances within a quarterly period a new well or other collection device must be installed within 120 days of initial exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

**Table A - 3**  
**Sample Individual Monitoring Exceedance Form**  
**Surface Monitoring Design Plan**

Use this form to record an individual monitoring exceedance and follow-up monitoring activities. This form is only used when a reading of 500 ppm above background is encountered during the surface monitoring. Use a separate form for each initial exceedance.

**Initial Monitoring Exceedance:**

Date: 12-16 Time: 10:30 (am) pm Monitoring Technician Initials: PA  
Instrument reading - Background reading: 708 ppm - -6 ppm = 714 ppm

Location of monitored exceedance (include description of field marker used):

Location 3, orange flags, ~300' SE of #18  
Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days:

**Remonitor location within 10 calendar days of initial exceedance:**

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.

If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

**Remonitor location within 10 calendar days of 2nd exceedance:**

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.

If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

(use additional forms if necessary)\*

\*If remonitoring shows 3 consecutive exceedances within a quarterly period a new well or other collection device must be installed within 120 days of initial exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

**Table A - 3**  
**Sample Individual Monitoring Exceedance Form**  
**Surface Monitoring Design Plan**

Use this form to record an individual monitoring exceedance and follow-up monitoring activities. This form is only used when a reading of 500 ppm above background is encountered during the surface monitoring. Use a separate form for each initial exceedance.

**Initial Monitoring Exceedance:**

Date: 12-16 Time: 12:12 am (pm) Monitoring Technician Initials: BW  
Instrument reading - Background reading: 798 ppm - -6 ppm = 804 ppm

Location of monitored exceedance (include description of field marker used):

Location 4 orange flags, ~50' NE #13  
Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days:

**Remonitor location within 10 calendar days of initial exceedance:**

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.

If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

**Remonitor location within 10 calendar days of 2nd exceedance:**

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:

Date: \_\_\_\_\_ Time: \_\_\_\_\_ am pm Monitoring Technician Initials: \_\_\_\_\_  
Instrument reading - Background reading: \_\_\_\_\_ ppm - \_\_\_\_\_ ppm = \_\_\_\_\_ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.

If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

(use additional forms if necessary)\*

\*If remonitoring shows 3 consecutive exceedances within a quarterly period a new well or other collection device must be installed within 120 days of initial exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

## Attachment E – Cover Integrity Inspection



**Table A - 4**  
**Sample Monthly Cover Integrity Inspection Form**  
**Surface Monitoring Design Plan**

<u>Month</u>	<u>Inspection Date</u>	<u>Inspector Initials</u>	<u>Cover Integrity Problems Found During Inspection</u>
January	___/___/___		
February	___/___/___		
March	___/___/___		
April	___/___/___		
May	___/___/___		
June	___/___/___		
July	___/___/___		
August	___/___/___		
September	___/___/___		
October	___/___/___		
November	___/___/___		
December	12/16/15	BW	- Exceedingly tall + dense vegetation - Areas with no vegetative cover - Areas with exposed GCL and erosion